GIOVIO PORTRAIT OF COLUMBUS.

PORTFOLIO

WORLDS COLUMBIAN EXPOSITION

1893

ILLUSTRATED BY

C. Graham

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THE WINTERS ART LITHOGRAPHING COMPANY'S

POPULAR PORTFOLIOS

OF THE

WORLD'S COLUMBIAN EXPOSITION

(№ 1) GROUNDS AND PRINCIPAL BUILDINGS
(№ 2) STATE BUILDINGS
(№ 3) FOREIGN BUILDINGS
(№ 4) LAGOONS AND ORIENTAL BUILDINGS

ILLUSTRATIONS FROM
WATER COLOR DRAWINGS
BY
C. Graham.

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THE MANUFACTURES AND LIBERAL ARTS BUILDING.

NOTABLE for its symmetrical proportions, the MANUFACTURES AND LIBERAL ARTS BUILDING is the mammoth structure of the Exposition. It measures 1,688 by 788 feet and covers more than 31 acres, being the largest Exposition building ever constructed. Within the building a gallery 50 feet wide extends around all four sides adding more than eight acres to the floor space available for exhibits, and making it 40 acres in all. Projecting from this gallery are 86 smaller galleries, 12 feet wide, from which visitors may survey the vast array of exhibits and the busy scene below. "Columbia Avenue," 50 feet wide extends through the mammoth building longitudinally and an Avenue of like width crosses it at right angles at the center. The main roof is of iron and glass and arches an area 385 by 1,400 feet and has its ridge 150 feet from the ground.

The LIBERAL ARTS BUILDING is in the Corinthian style of architecture and in point of being severely classic, excels nearly all of the other edifices. The long array of columns and arches, which its facades present, is relieved from monotony by very elaborate ornamentation. In this ornamentation female figures, symbolical of the various arts and sciences, play a conspicuous and very attractive part.

Designs showing in relief the seals of the different States of the Union and of various Foreign Nations also appear in the ornamentation. These, of course, are gigantic in their proportions. The AGRICULTURAL BUILDING perhaps is the only one which has a more elaborately ornamental exterior than has this colossal structure.

The exterior of the building is covered with "staff," which is treated to represent marble. The huge fluted columns and the immense arches are apparently of this beautiful material. The grand entrances at the corners of the building and midway at the sides consist of lofty arches in piers of elaborate design and ornamentation. There are numerous other entrances less imposing.

The architect of this gigantic building, GEORGE B. POST, of New York, has been remarkably successful in giving architectural symmetry and effectiveness to the immense proportions with which he had to deal and his work stands as one of the marvels of the Exposition.

The building occupies a most conspicuous place in the Grounds. It faces the Lake, with only lawns and promenades between. North of it is the UNITED STATES GOVERNMENT BUILDING, south the Harbor and in-jutting Lagoon, and west the ELECTRICAL BUILDING and the Lagoon separating it from the Wooded Island.

THE GOVERNMENT BUILDING.

DELIGHTFULLY located near the Lake shore, south of the main Lagoon and of the area reserved for the Foreign Nations and the several States, and east of the WOMAN'S BUILDING and of MIDWAY PLAISANCE, is the GOVERNMENT EXHIBIT BUILDING. MEXICO'S BUILDING stands just north of that of the United States, across the Lagoon. The GOVERNMENT BUILDING was designed by Architect WINDRIM, now succeeded by W. J. EDBROOKE. It is classic in style, and bears a strong resemblance to the National Museum and other Government buildings at Washington. It covers an area of 350 by 420 feet, is constructed of iron, brick and glass, and cost $400,000. Its leading architectural feature is a central octagonal dome 120 feet in diameter and 150 feet high, the floor of which will be kept free from exhibits. The building fronts to the west, and connects on the north, by a bridge over the Lagoon, with the building of the FISHERIES EXHIBIT.

The south half of the GOVERNMENT BUILDING is devoted to the exhibits of the Post-Office Department, Treasury Department, War Department and Department of Agriculture. The north half is devoted to the exhibits of the Fisheries Commission, Smithsonian Institute and Interior Department. The State Department exhibit extends from the rotunda to the east end and that of the Department of Justice from the rotunda to the west end of the building. The allotment of space for the several department exhibits is: War Department, 23,000 square feet; Treasury, 10,500 square feet; Agricultural, 23,250 square feet; Interior, 24,000 square feet; Post-Office, 9,000 square feet; Fishery, 20,000 square feet, and Smithsonian Institute, balance of space.

The Treasury Department Exhibit is in charge of Assistant Secretary NETTLETON. He matured the plans whereby the Mint, the Coast and the Geodetic Survey, the Supervising Architect of the Treasury, the Bureau of Engraving and Printing, the Bureau of Statistics, the Life-Saving Board, the Lighthouse Board and the Marine Hospital all have made exhibits.

The authorities of the Mint show not only a complete group of the coins made by the United States, but a number of the coins of foreign countries.

The Supervising Architect of the Treasury shows a number of photographs of all of the public buildings of the Capital. These include not only the buildings, but they also include the parks and reservations.

The Bureau of Engraving and Printing shows many new bills under framing. These include a sample of every bill of every denomination that the United States Government now authorizes as money.

A Life-Saving Station is built and equipped with every appliance and a regular crew goes through all life-saving manoeuvres.

Perhaps the most interesting exhibit of the whole Treasury Department is that by the Coast Survey. It includes a huge map of the United States, about 400 feet square or about the size of a square of city property. This is accurately constructed plaster of paris and is placed horizontally on the Exposition grounds with a huge covering erected over it, with galleries and pathways on the inside to allow the visitors to walk over the whole United States with out touching it. This model is built on a scale showing the exact height of mountains, the depth of the rivers and the curvature of the earth.

The Quartermaster's Department shows lay-figure officers and men of all grades in the army, mounted, on foot, fully equipped in the uniform of their rank and service.

Aside from these there are nineteen figures, showing the uniforms worn during the Revolutionary War and the War of 1812 and thirty-one figures showing the uniforms in the Mexican War. A novel exhibit is that of a telephone as used on the battlefield. The heliograph, which practically annihilates distance in the matter of talking, is shown in full operation. All means of army telegraphing and signalling with the batteries, lines, cables, bombs, torches, and so forth, are shown with great elaborateness.

Capt. WHIPPLE, of the Ordnance Department, developed the plan for an exhibit of huge guns and explosives. At certain hours of the day there are regular battery drills and loading and firing of pieces. Many of the guns used are the finest of their kind in the world.

The exhibit of the Medical Bureau occupies a hospital built especially for its use, operated by a corps of hospital nurses and doctors.

CASINO AND PIER.

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THE CASINO AND PIER.

ALL visitors to the Exposition, it is safe to say, will inspect the CASINO AND PIER, and not only inspect them, but enjoy thoroughly the delights which they, together with their surroundings, afford. The PIER is eighty feet wide and extends 1000 feet out into Lake Michigan from the eastern extremity of the Grand Court or avenue running from the ADMINISTRATION BUILDING to the Lake. Along the shore, on either side of the PIER, are broad, beautiful promenades, where thousands of visitors will throng in the intervals of sight-seeing in the Exposition Buildings.

From the shore promenade they will walk out on the PIER to the beautiful CASINO at the extremity.

The CASINO is a composite structure, embracing nine pavilions. and was planned by its architects, BURLING & WHITEHOUSE, of Chicago, to be a representation of Venice, on a small scale, in the waters of Lake Michigan. Accordingly, its architecture is of the Venetian order. The CASINO is built on piles, and measures 180 by 400 feet. With the exception of the central pavilion, which rises to the height of 180 feet, the pavilions are two stories high, rising eighty feet from the water. There is communication between the nine pavilions, both by gondolas and bridges. Completely surrounded by water this structure, with its fleet of boats and numerous water-ways, presents a decidedly Venetian aspect. Surrounding the central pavilion runs a gallery fifty-six feet wide. At the west end of the PIER stand the thirteen columns designed by Sculptor ST. GAUDENS to represent the Thirteen Original States. In front of the CASINO is the harbor for small pleasure craft.

At night this harbor is lighted by incandescent lamps sunk beneath the surface of the water on floats. The material of the CASINO is of wood and the walls are covered with "staff." A striking combination of high colorings is effected. Within the pavilions of the CASINO are various conveniences that contribute to the comfort and enjoyment of visitors.

Fanned by the cooling breezes of the Lake, visitors may sit and listen to the strains of excellent music, may partake of light refreshments, may look out upon the vast expanse of water and watch the going and coming of gaily-decorated pleasure craft, and the heavily laden passenger steamers plying to and fro between the PIER and the City, or may turn shoreward and survey the throngs of promenaders along the beach, and the magnificent array of Exposition palaces and other attractions. The PIER AND CASINO constitute one of the most popular of Exposition resorts.

MACHINERY HALL.

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THE MACHINERY HALL.

MACHINERY HALL, of which PEABODY & STEARNS, of Boston, are the architects, has been pronounced by many architects second only to the ADMINISTRATION BUILDING in the magnificence of its appearance. This building measures 850 x 500 feet, and with the MACHINERY ANNEX and POWER HOUSE, cost about $1,000,000. It is located at the extreme south end of the Park, midway between the shore of Lake Michigan and the west line of the Park. It is just south of the ADMINISTRATION BUILDING, and west and across a Lagoon from the AGRICULTURAL BUILDING. The building is spanned by three arched trusses, and the interior presents the appearance of three railroad train-houses side by side, surrounded on all of the four sides by a gallery 50 feet wide. The trusses are built separately, so that they can be taken down and sold for use as railroad train-houses. In each of these long naves there is an elevated traveling crane running from end to end of the building, for the purpose of moving machinery. These platforms are built so that visitors may view from them the exhibits beneath. The power for this building is supplied from a power-house adjoining the south side of the building. The two exterior sides adjoining the Grand Court are rich and palatial in appearance.

All of the buildings on this great plaza are designed with a view to making a grand background for display, and, in order to conform to the general richness of the court and add to the striking appearance, the two facades of the MACHINERY HALL on the court are rich with colonnades and other features. The design follows classical models throughout, the detail being followed from the renaissance of Seville and other Spanish towns, as being appropriate to a Columbian celebration. An arcade on the first story admits passage around the buildings under cover, and as in all the other buildings, the front is formed of "staff" colored to an attractive tone; the ceilings are enriched with strong color. A colonnade with a cafe at either end forms the length between MACHINERY and AGRICULTURAL HALLS, and in the center of this colonnade is an achway leading to the Cattle Exhibit. From this portico there extends a view nearly a mile in length down the Lagoon, and an obelisk and fountain in the Lagoon form the southern point of this vista.

The MACHINERY ANNEX adjoins MACHINERY HALL on the west, and is an annex in fact, and not a detached structure as at first planned, with entrance by subways under the railway tracks. The ANNEX covers between four and five acres and increases the length of the Machinery building to nearly 1,400 feet, thus rendering it the second largest of all the Exposition structures, the great manufactures building alone exceeding it in size.

THE ELECTRICAL BUILDING.

THE ELECTRICAL BUILDING is 351 feet wide and 767 feet long, the major axis running north and south. The south front is on the great Quadrangle or Court; the north front faces the Lagoon; the east front is opposite the MANUFACTURES BUILDING, and the west faces the MINES BUILDING.

The general scheme of the plan is based upon a longitudinal nave 115 feet wide and 114 feet high, crossed in the middle by a transept of the same width and height. The nave and the transept have a pitched roof with a range of skylights at the bottom of the pitch and clearstory windows. The rest of the building is covered with a flat roof, averaging 62 feet in height and provided with skylights.

The second story is composed of a series of galleries connected across the nave by two bridges, with access by four grand staircases. The area of the galleries in the second story is 118,546 square feet, or 2.7 acres.

The exterior walls of this building are composed of a continuous Corinthian order of pilasters 3 feet 6 inches wide and 42 feet high, supporting a full entablature, and resting upon a stylobate 8 feet 6 inches. The total height of the walls from the grade outside is 68 feet 6 inches.

The north pavilion is placed between the two great apsidal or semi-circular projections of the building; it is flanked by two towers 195 feet high. The central feature is a great semi-circular window, above which, 102 feet from the ground, is a colonnade forming an open loggia or gallery, commanding a view over the Lagoon and all the north portion of the Grounds.

The east and west central pavilions are composed of two towers, 168 feet high. In front of these two pavilions there is a great portico composed of the Corinthian order with full columns.

The south pavilion is a hemicycle or niche, 78 feet in diameter and 103 feet high. The opening of this niche is framed by a semi-circular arch, which is crowned by a gable or pediment with smaller gables on the returns, and surmounted by an attic, the whole reaching the height of 142 feet. In the center of this niche, upon a lofty pedestal, is a colossal statue of FRANKLIN, whose illustrious name intimately connects the early history of the Republic with one of the most important discoveries in the phenomena of electricity.

At each of the four corners of the building there is a pavilion, above which rises a light open spire or tower, 169 feet high. Intermediate between these corner pavilions and the central pavilions on the east and west sides, there is a subordinate pavilion bearing a low, square dome upon an open lantern. There are thus ten spires and four domes. The entablature of the great Corinthian order breaks around each of the pilasters of the four fronts, and above each pilaster in the Attic order is a pedestal bearing a lofty mast for the display of banners by day and electric lights by night. Of these masts there are in all fifty-four.

The first story of the building is indicated in these facades between the great pilasters of the Corinthian order, by a subordinate Ionic order, with full columns and pilasters, forming an open screen in front of the windows.

The ELECTRICITY BUILDING has an open portico extending along the whole of the south facade, the lower or Ionic order forming an open screen in front of it. The various subordinate pavilions are treated with windows and balconies. The details of the exterior orders are richly decorated, and the pediments, friezes, panels and spandrils have received a decoration of figures in relief, with architectural motifs, the general tendency of which is to illustrate the purposes of the building.

The color of the exterior is like marble, but the walls of the hemicycle and of the various porticos and loggia are highly enriched with color, the pilasters in these places being decorated with scagliola and the capitals with metallic effects in bronze.

In the design of this building it was proposed by the architects to so devise its details and general outlines that they might be capable of providing an electric illumination by night on a scale hitherto unknown, the flag-staffs, the open porticos, and the towers, especially, being arranged with this in view. Van Brunt & Howe, of Kansas City, are the architects.

It was proposed that the hemicycle or niche which forms the south porch should have either a great chandelier or crown of lights suspended from the center of the half dome, or should be provided with electric lights masked behind the triumphal arch which forms the opening of the niche.

Fisheries and Aquarium.

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THE FISHERIES BUILDING.

PICTURED on the opposite page is the FISHERIES BUILDING, including the two smaller polygonal buildings connected with the main building on either end by arcades. The extreme length of the building is 1,100 feet, and the width 200 feet. It is built on a banana-shaped island, and sub-divided into three parts to conform to the shape of the site.

In the central portion is the general Fisheries Exhibit. In one of the polygonal buildings is the Angling Exhibit, and in the other the Aquaria. The exterior of the building is Spanish-Romanesque, which contrasts agreeably in appearance with the other buildings.

The Fish Exhibit is a wonderful one, and not the least interesting portion of it is the Aquarial or Live Fish display. This is contained in a circular building, 135 feet in diameter, standing near one extremity of the main FISHERIES BUILDING and in a great curved corridor connecting the two.

In the center of the circular building is a rotunda 60 feet in diameter, in the middle of which is a basin or pool 26 feet wide, from which rises a towering mass of rocks covered with moss and lichens. From clefts and crevices in the rocks crystal streams of water gush and drop to the masses of reeds, rushes, and ornamental semi-aquatic plants in the basin below. In this pool gorgeous gold fishes, golden ides, golden tench, and other fishes disport. From the rotunda one side of the larger series of aquaria may be viewed. These are ten in number and have a capacity of 7,000 to 27,000 gallons of water each.

Passing out of the rotunda by the entrances, a great corridor or arcade is reached, where on one hand can be viewed the opposite side of the series of great tanks and on the other a line of tanks somewhat smaller, ranging from 750 to 1,500 gallons each in capacity. The corridor or arcade is about 15 feet wide. The glass fronts of the Aquaria are in length about 575 feet and have 3,000 square feet of surface. They make a panorama never before seen in any exhibition, and rival the great permanent aquariums of the world not only in size but in all other repects.

The total water capacity of the Aquaria, exclusive of reservoirs, is 18,725 cubic feet, or 140,000 gallons. This weighs 1,192,425 pounds, or almost 600 tons. Of this amount about 40,000 gallons is devoted to the Marine Exhibit. In the entire salt water circulation, including reservoirs, there are abot 80,000 gallons. The pumping and distributing plant for the Marine Aquaria is constructed of valcanite. The pumps are in duplicate and each has a capacity of 3,000 gallons per hour. The supply of sea water was secured by evaporating the necessary quantity at the Woods Holl station of the United States Fish Commission to about one-fifth its bulk, thus reducing both quantity and weight for transportation about 80 per cent. The fresh water required to restore it to its proper density was supplied from Lake Michigan.

In transporting the marine fishes to Chicago from the coast there was an addition of probably 3,000 gallons of pure sea water to the supply on each trip Every visitor will take a deep interest in the Fisheries Exhibit.

THE HORTICULTURAL BUILDING.

IMMEDIATELY south of the entrance to Jackson Park from the Midway Plaisance, and facing east on the Lagoon, is the HORTICULTURAL BUILDING. In front is a flower terrace for outside exhibits, including tanks for Nympheas and the Victoria-Regia. The front of the terrace, with its low parapet between large vases, borders the water, and at its center forms a boat landing.

The building is 1,000 feet long, with an extreme width of 286 feet. The plan is a central pavilion with two end pavilions, each connected with the center pavilion by front and rear curtains, forming two interior courts, each 88 by 270 feet. These courts are beautifully decorated in color and planted with ornamental shrubs and flowers. The center pavilion is roofed by a crystal dome 187 feet in diameter and 113 feet high, under which are exhibited the tallest palms, bamboos and tree ferns that can be procured. There is a gallery in each of the pavilions. The galleries of the end pavilions are designed for cafes, the situation and the surroundings being particularly adapted to recreation and refreshment. These cafes are surrounded by an arcade on three sides, from which charming views of the Grounds can be obtained.

In this building are exhibited all the varieties of flowers, plants, vines, seeds, horticultural implements, etc. Those exhibits requiring sunshine and light are shown in the rear curtains, where the roof is entirely of glass and not too far removed from the plants. The front curtains and space under the galleries are designed for exhibits that require only the ordinary amount of light. Provision is made to heat such parts as require it.

The exterior of the building is in "staff," tinted in a soft warm buff, color being reserved for the interior and the courts.

The cost of this building was about $400,000.

Birdseye View of Grounds and Buildings.

COPYRIG
THE WINTERS ART

Columbian Exposition, Chicago, 1893.

THE WOMAN'S BUILDING.

ENCOMPASSED by luxuriant shrubs and beds of fragrant flowers, like a white silhoutte against a back ground of old and stately oaks, is seen the WOMAN'S BUILDING, situated in the north-western part of the Park, separated by a generous distance from the HORTICULTURAL BUILDING on the one side, and the ILLINOIS STATE BUILDING on the other, and facing the great Lagoon with the Wooded Island as a vista. A more beautiful site could not have been selected for this daintily designed building.

Amongst a great number of sketches submitted in competition for this building by women from all over the land, it did not take the President of the Board of Lady Managers, MRS. POTTER PALMER, long, with her exquisite taste, to decide upon her choice. She quickly discovered in the sketch submitted by MISS SOPHIA G. HAYDEN that harmony of grouping and gracefulness of details which indicate the architectural scholar, and to her was awarded the first prize of a thousand dollars, and also the execution of the design. The second and third prizes were given respectively to MISS LOIS L. HOWE, of Boston, and MISS LAURA HAYES, of Chicago, both fully deserving the honors conferred upon them.

MISS HAYDEN, who, as a pupil in the architectural class in the School of Technology, in Boston, graduated with high honors, immediately went to Chicago and personally made the plans and elevations for the building.

Directly in front of the building the Lagoon takes the form of a bay, about 400 feet in width. From the center of this bay a grand landing and staircase leads to a terrace six feet above the water. Crossing this terrace other staircases give access to the ground, four feet above, on which, about 100 feet back, the building is situated. The first terrace is designed in artistic flower beds and low shrubs, forming, together with the creamy-white balustrades rising from the water's edge, and also in front of the second terrace, a charming foreground for the fine edifice. The principal facade has an extreme length of 400 feet, the depth of the building being half this distance. Italian renaissance is the style selected. Its delicacy of lines is well adapted to represent this temple for the fair sex.

The main grouping consists of a center pavilion flanked at each end with corner pavilions connected in the first story by open arcades in the curtains, forming a shady promenade the whole length of the structure. The first story is raised about ten feet from the ground line, and a wide staircase leads to the center pavilion. This pavilion, forming the main triple arched entrance with an open colonnade in the second story, is finished with a low and beautifully proportioned pediment enriched with a highly elaborate bas-relief. The corner pavilions, being like the rest of the building, two stories high, with a total elevation of 60 feet, have each an open colonnade added above the main cornice. Here are located the Hanging Gardens, and also the committee rooms of the Board of Lady Managers.

A lobby 40 feet wide leads into the open rotunda, 70 x 65 feet, reaching through the height of the building and protected by a richly ornamented skylight. This rotunda is surrounded by a two story open arcade, as delicate and chaste in design as the exterior, the whole having a thoroughly Italian court-yard effect, admitting abundance of light to all rooms facing this interior space. On the first floor, on each side of the main entrance and occupying the entire space of curtains, are located, on the left hand, a model hospital, on the right a model kindergarten, each occupying 80 x 60 feet.

The whole floor of the south pavilion is devoted to the retrospective exhibit, the one on the north, to reform work and charity organization. Each of these floors is 80 x 200 feet. The curtain opposite the main front contains the library, bureau of information, records, etc.

In the second story, above the main entrance and curtains, are located ladies' parlors, committee rooms and dressing rooms, all leading to the open balcony in front, and commanding a splendid panorama of almost the entire ground. The whole second floor of the north pavilion incloses the great Assembly-room and Club-room. The first of these is provided with an elevated stage, where wise words will be heard from pretty lips. The south pavilion contains the model kitchen, refreshment rooms, reception rooms, etc.

The building is contructed of "staff," the same material used for the rest of the buildings, and as it stands with its mellow, decorated walls bathed in the bright sunshine, the women of the country are justly proud of the result.

WOMANS BUILDING

THE TRANSPORTATION BUILDING.

FORMING the Northern or Picturesque Quadrangle is a group of buildings of which the TRANSPORTATION BUILDING is one. It is situated at the southern end of the west flank and lies between the HORTICULTURAL and the MINES BUILDINGS. Its axial relation is with the MANUFACTURES BUILDING on the east side of the Quadrangle, the central feature of each of the two buildings being on the same east and west line.

The TRANSPORTATION BUILDING is exquisitely refined and simple in architectural treatment, although it is very rich and elaborate in detail. In style it savors much of the Romanesque, although to the initiated the manner in which it is designed on axial lines and the solicitude shown for fine proportions, and subtle relation of parts to each other, will at once suggest the methods of composition followed at the Ecole des Beaux Arts.

Viewed from the Lagoon, the cupola of the TRANSPORTATION BUILDING will form the effective southwest accent of the Quadrangle, while from the cupola itself, reached by eight elevators, the Northern Court, the most beautiful effect of the entire Exposition, may be seen in all its glory.

The main entrance to the TRANSPORTATION BUILDING will consist of an immense single-arch enriched to an extraordinary degree with carvings, bas-reliefs and mural paintings, the entire feature forming a rich and beautiful yet quiet color climax, for it is treated in leaf and is called the golden door.

The remainder of the architectural composition falls into a just relation of contrast with the highly wrought entrance, and is duly quiet and modest though very broad in treatment. It consists of a continuous arcade with subordinated colonnade and entablature. Numerous minor entrances are from time to time pierced in the walls, and with them are grouped terraces, seats, drinking fountains and statues.

The interior of the building is treated much after the manner of a Roman Basilica, with broad nave and aisles. The roof is therefore in three divisions; the middle one rises much higher than the others, and its walls are pierced to form a beautiful arcaded clearstory. The cupola, placed exactly in the center of the building and rising 165 feet above the ground, is reached by eight elevators. These elevators will of themselves naturally form a part of the Transportation Exhibit, and as they will also carry passengers to galleries at various stages of height, a fine view of the interior of the building may easily be obtained. The main galleries of this building, because of the abundant placing of passenger elevators, will prove quite accessible to visitors.

The main building of the TRANSPORTATION EXHIBIT measures 960 feet front by 256 feet deep; from this will extend westward to Stony Island avenue, a triangular Annex covering about nine acres, and consisting of one story buildings 64 feet wide, set side by side. There will be a railway track every 16 feet and all these tracks will run east and west. These Annex buildings may be used to exhibit an entire freight or passenger train coupled up with its engine. It is likely that the display of locomotive engines will be quite stupendous, for they will all be placed end on to the central avenue or nave of the main building. As there will probably be at least 100 engines exhibited, and placed so as to face each other, the perspective effect of the main avenue will be remarkably effective. Add to the effect of the exhibits the architectural impression given by a long vista of richly ornamented colonnade, and it may easily be imagined that the interior of the TRANSPORTATION BUILDING will be one of the most impressive of the Exposition.

The exhibits to be placed in the building will naturally include everything of whatsoever name or sort devoted to the purpose of Transportation, and will range from a baby carriage to a mogul engine, from a cash conveyor to a balloon or carrier pigeon. Technically, this exhibit will include everything comprised in Class G of the Official Classification.

To assist in the placing of exhibits, a transfer railway with 75 foot tables will run the entire length of the structure and immediately west of the main building.

THE ADMINISTRATION BUILDING.

By popular verdict the ADMINISTRATION BUILDING is pronounced the gem and crown of the Exposition Buildings. It is located at the west end of the great court in the southern part of the site, looking eastward, and at its rear are the transportation facilities and depot. The object most conspicuous which will attract the gaze of visitors on reaching the grounds is the Gilded Dome of this great building. This great edifice cost about $550,000. The architect is RICHARD M. HUNT, of New York, President of the American Institute of Architects, to whose established reputation it is a notable contribution. It covers an area of 250 feet square and consists of four pavilions 84 feet square, one at each of the four angles of the square and connected by a great central dome 120 feet in diameter and 220 feet in height, leaving at the center of each facade a recess 82 feet wide, within which are the grand entrances to the building. The general design is in the style of the French renaissance. The first great story is in the Doric order, of heroic proportions, surrounded by a lofty balustrade and having the great tiers of the angle of each pavilion crowned with sculpture. The second story, with its lofty and spacious colonnade, is of the Ionic order.

Externally the design may be divided in its height into three principa stages. The first stage consists of the four pavilions, corresponding in height with the various buildings grouped about it, which are about 65 feet high. The second stage, which is of the same height, is a continuation of the central rotunda, 175 feet square, surrounded on all sides by an open colonnade of noble proportions, 20 feet wide and 40 feet high, with columns 4 feet in diameter. This colonnade is reached by staircases and elevators from the four principal halls and is interrupted at the angles by corner pavilions, crowned with domes and groups of statuary. The third stage consists of the base of the great dome, 30 feet in height, and octagonal in form, and the dome itself. This great dome is gilded, and forms a fitting crown to the first and second stages of the magnificent edifice.

The four great entrances, one on each side of the building, are 50 feet wide and 50 feet high, deeply recessed and covered by semi-circular arched vaults, richly coffered. In the rear of these arches are the entrance doors, and above them great screens of glass, giving light to the central rotunda. Across the face of these screens, at the level of the office floor, are galleries of communication between the different pavilions.

The interior features of this great building even exceed in beauty and splendor those of the exterior. Between every two of the grand entrances, and connecting the intervening pavilion with the great rotunda, is a hall or loggia, 30 feet square, giving access to the offices and provided with broad, circular stairways and swift running elevators. Internally, the rotunda is octagonal in form, the first story being composed of eight enormous arched openings, corresponding in size to the arches of the great entrances. Above these arches is a freize, 27 feet in width, the panels of which are filled with tablets, borne by figures carved in low relief and covered with commemorative inscriptions.

Above the balcony is the second story, 50 feet in height. From the top of the cornice of this story rises the interior dome, 200 feet from the floor, and in the center is an opening 50 feet in diameter, transmitting a flow of light from the exterior dome overhead. The under side of the dome is enriched with deep panelings, richly moulded, and the panels are filled with sculpture, in low relief, and immense paintings, representing the arts and sciences. In size this rotunda rivals, if it does not surpass, the most celebrated domes of a similar character in the world.

Each of the corner pavilions, which are four stories in height, is divided into large and small offices for the various Departments of the Administration, and lobbies and toilet rooms. The ground floor contains, in one pavilion, the Fire and Police Departments, with cells for the detention of prisoners; in a second pavilion are the offices of the Ambulance Service, the Physician and Pharmacy, the Foreign Department and the Information Bureau; in the third pavilion, the Post-Office and a Bank, and in the fourth the offices of Public Comfort and a restaurant. The second, third and fourth stories contain the Board rooms, the Committee rooms, the rooms of the Director-General, the Department of Publicity and Promotion, and of the United States Columbian Commission.

ADMINISTRATION BUILDING.

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THE ART PALACE.

GRECIAN-IONIC in style, this building is a pure type of the most refined classic architecture. The building is oblong and is 500 by 320 feet, intersected north, east, south and west by a great nave and transept 100 feet wide and 70 feet high, at the intersection of which is a great dome 60 feet in diameter. The building is 125 feet to the top of the dome, which is surmounted by a colossal statue of the type of famous figures of winged victory. The transept has a clear space through the center of 60 feet, being lighted entirely from above.

On either side are galleries 20 feet wide, and 24 feet above the floor. The collections of the sculpture are displayed on the main floor of the nave and transept, and on the walls of both the ground floor and of the galleries are ample areas for displaying the paintings and sculptured panels in relief. The corners made by the crossing of the nave and transept are filled with small picture galleries.

Around the entire building are galleries 40 feet wide, forming a continuous promenade around the classic structure. Between the promenade and the naves are the smaller rooms devoted to private collections of paintings and the collections of the various art schools. On either side of the main building are several one-storied annexes, divided into large and small galleries. These annexes are 120 by 200 feet wide.

The main building is entered by four great portals, richly ornamented with architectural sculpture, and approached by broad flights of steps. The walls of the loggia of the colonnades are higly decorated with mural paintings, illustrating the history and progress of the arts. The frieze of the exterior walls and the pediments of the principal entrances are ornamented with sculptures and portraits in bas-relief of the masters of ancient art.

The general tone or color is light gray stone.

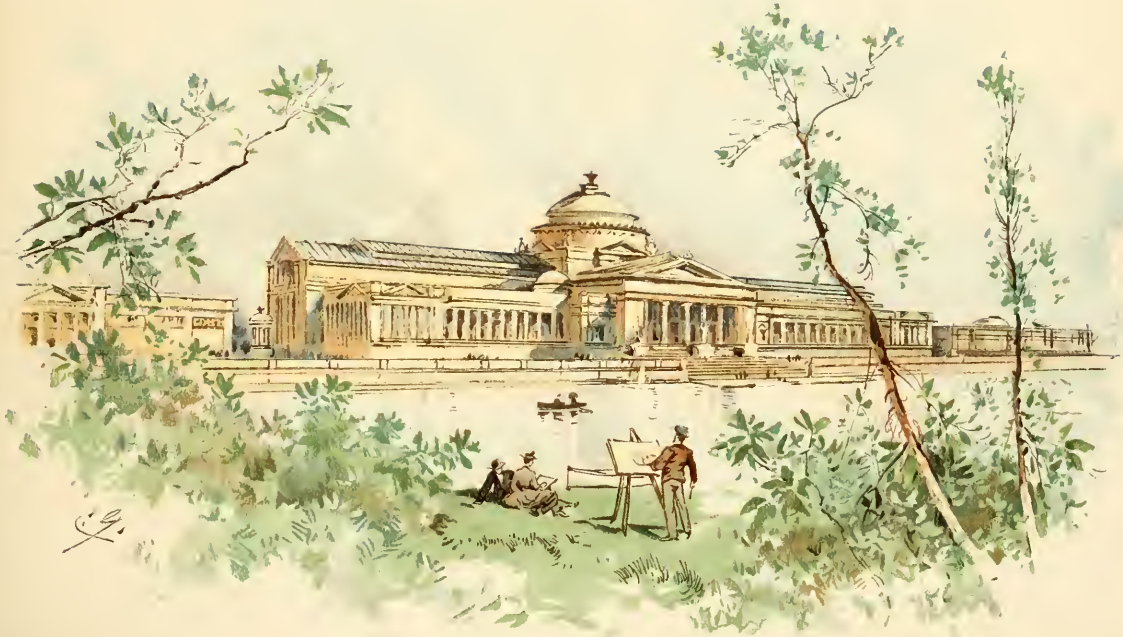
The construction, although of a temporary character, is necessarily fireproof. The main walls are of solid brick, covered with "staff," architecturally ornamented, while the roof, floors and galleries are of iron.

All light is supplied through glass sky-lights in iron frames.

The building is located beautifully in the northern portion of the Park, with the south front facing the Lagoon. It is separated from the Lagoon by beautiful terraces, ornamented with balustrades, with an immense flight of steps leading down from the main portal to the Lagoon, where there is a landing for boats. The north front faces the wide lawn and the group of State buildings. The immediate neighborhood of the building is ornamented with groups of statues, replica ornaments of classic art, such as the Choriagic monument, the "Cave of the Winds," and other beautiful examples of Grecian art. The ornamentation also includes statues of heroic and life-size proportions.

This building cost between $500,000 and $600,000.

The ART PALACE was planned in the World's Fair Construction Department under the eye of Supervising Architect D. H. BURNHAM, and the details worked out by Chief Designer P. B. ATWOOD; the annex is substantially, in its facade at least, the outline plan left by the late consulting architect GEORGE W. ROOT.



GALLERY OF FINE ARTS.

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THE NAVAL EXHIBIT.

UNIQUE among the other exhibits is that made by the UNITED STATES NAVY DEPARTMENT. It is in a structure which, to all outward appearance, is a faithful, full-sized model of one of the new coast-line battleships designed by the Bureau of Construction and Repairs of the Navy Department, and now being built at a cost of about $3,000,000 each by CRAMP & SON, Philadelphia, and the UNION IRON WORKS, San Francisco. This imitation Battleship of 1893 is erected on piling on the Lake front in the northeast portion of Jackson Park. It is surrounded by water and has the appearance of being moored to a wharf. The structure has all the fittings that belong to the actual ship, such as guns, turrets, torpedo tubes, torpedo nets and booms, with boats, anchors, chain cables, davits, awnings, deck fittings, etc., etc., together with all appliances for working the same. Officers, seamen, mechanics and marines are detailed by the Navy Department during the Exposition, and the discipline and mode of life on our naval vessels are completely shown. The detail of men is not, however, as great as the complement of the actual ship. The crew give certain drills, especially boat, torpedo and gun drills, as in a vessel of war.

The dimensions of the structure are those of the actual Battleship, to-wit: length, 348 feet and width amidships, 69 feet 3 inches; from the water line to the top of the main deck, 12 feet. Centrally placed on this deck is a superstructure 8 feet high with a hammock berthing on the same 7 feet high, and above these are the bridge, chart-house and the boats.

At the forward end of the superstructure there is a cone-shaped tower, called the "military mast," near the top of which are placed two circular "tops" as receptacles for sharpshooters. Rapid firing guns are mounted in each of these tops. The height from the water line to the summit of this military mast is 76 feet, and above is placed a flagstaff for signalling.

The battery mounted comprises four 13-inch breech loading rifle cannon; eight 8-inch breech loading rifle cannon; four 6-inch breech loading rifle cannon; twenty 6-pounder rapid firing guns; six 1-pounder rapid firing guns; two Gatling-guns, and six torpedo tubes or torpedo guns. All of these are placed and mounted respectively as in the genuine battleship.

The superstructure shows the cabins, staterooms, lavatories, lactrines, mess-rooms, galley and fittings, mess-table for crew, lockers, berthings, etc., also the manner in which officers and enlisted men live, according to the rules of the Navy. On the superstructure deck and bridge is shown the manner in which the rapid firing guns, search lights, boats, etc., are handled. The entrance to the conning tower is from the deck, in which are all appurtenances that the captain has at his disposal when taking the ship into battle and during the progress of a fight at sea.

An electric light plant is installed and provision made for heating with steam. On the berth deck are shown the various fittings pertaining to the hull, machinery and ordnance; ordnance implements, including electrical devices, gun-carriage motors and range finders; models showing typical ships of the past and present; samples of the provisions, clothing, stores and supplies, bunting, flags, etc.; in short, the thousand and one things that go to make up the outfit of a man-of-war.

The traditional costumes of the sailors of the Navy from 1775 to 1848 are shown by janitors dressed in those costumes.

On the starboard side of the ship is shown the torpedo protection net, stretching the entire length of the vessel. Steam launches and cutters ride at the booms, and all the outward appearance of a real ship of war is imitated.

The design for the NAVAL EXHIBIT was conceived by Capt. R. W. MEADE, U. S. N., the Naval Director, and member of the Board of Control and Management of the UNITED STATES GOVERNMENT EXHIBIT, but the details of his plan were worked out by one of the leading draughtsmen of the Bureau of Construction, Mr. F. W. CROGAN, assisted by Mr. MIDDLETON, draughtsman from the office of the Supervising Architect of the Treasury Department, and Lieut. E. D. TANSIG, U. S. N., who were detailed by the Navy Department to assist Capt. MEADE.

Nothing of the kind has ever before been attempted at a World's Fair. The cost of this curious and original building is about $100,000.

U. S. Man of War.

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THE HALL OF MINES AND MINING.

LOCATED at the southern extremity of the western Lagoon or Lake, and between the ELECTRICITY and TRANSPORTATION BUILDINGS, is the MINES AND MINING BUILDING. The architect of this building, which is 700 feet long by 350 wide, is S. S. BEMAN, of Chicago. Its architecture has its inspiration in early Italian renaissance, with which sufficient liberty is taken to invest the building with the animation that should characterize a great general Exposition. There is a decided French spirit pervading the exterior design, but it is kept well subordinated. In plan it is simple and straightforward, embracing on the ground floor spacious vestibules, restaurants, toilet rooms, etc. On each of the four sides of the building are placed the entrances, those of the north and south fronts being the most spacious and prominent. To the right and left of each entrance, inside, start broad flights of easy stairs leading to the galleries. The galleries are 60 feet wide and 25 feet high from the ground floor, and are lighted on the sides by large windows and from above by a high clearstory extending around the building.

The main fronts look southward on the great Central Court and northward on the western and middle lakes and a beautiful thickly wooded island. These principal fronts display enormous arched entrances, richly embellished with sculptural decorations, emblematic of Mining and its allied industries. At each end of these fronts are large square pavilions surmounted by low domes which mark the four corners of the building and are lighted by large arched windows extending through the galleries.

Between the main entrance and the pavilions are richly decorated arcades forming an open loggia on the ground floor and a deeply recessed promenade on the gallery floor level, which commands a fine view of the lakes and islands to the northward and the great Central Court on the south. These covered promenades are each 25 feet wide and 230 feet long, and from them is had access to the building at numerous points. These loggias on the first floor are faced with marbles of different kinds and hues, which will be considered part of the Mining Exhibit, and so utilized as to have marketable value at the close of the Exposition. The loggia ceilings will be heavily coffered and richly decorated in plaster and color. The ornamentation is massed at the prominent points of the facade. The exterior presents a massive, though graceful appearance.

The main fronts are 65 feet high from ground to top of cornice, and the main central entrances are 90 feet to apex of pediment. The long sides of the building are treated in a simpler manner than the main fronts; large segmental windows extend through the galleries and are placed between the broad piers, affording an abundance of light to the space beneath the galleries.

The two-storied portion of the building, of which the gallery forms the upper part, extends entirely around the structure and is 60 feet wide. This portion is built of wood and iron combined.

The great interior space thus enclosed is one story high, 630 feet long and 230 feet wide, with an extreme height of 100 feet at center and 47 feet at sides, and is spanned by steel cantilever roof trusses supported on steel columns placed 65 feet apart longitudinally, and 115 feet and 57 feet 6 inches transversely, thus leaving clear space in center of building 630 feet long, and 115 feet wide, with two side divisions, each 57 feet 6 inches wide and 630 feet long, leaving the central space encumbered with only 16 supporting steel posts. The cantilevers are of pin connection to facilitate erection. The inner and higher ends of the cantilevers are 46 feet apart and the space between them is spanned by riveted steel trusses with an elliptical chord.

These trusses are designed so as to form a clearstory 12 feet high, with vertical sash extending the entire length of central space—630 feet; said space terminating at each end with a great glass gable setting back 60 feet from front ends of building. The wide spacings of the cantilever necessitated an extensive system of longitudinal perlines of the riveted lattice type.

A great portion of the roof is covered with glass. It may be of interest to state that the cantilever system as applied to roofs has not been used heretofore on so large a scale and that the MINES BUILDING is the only one of the Exposition group, excepting the large domes, that has steel roof trusses.

The exterior of this building, like that of all the others, will be made of "staff," similar to that used in facing the recent Paris Exposition buildings. The cost of the MINES BUILDING is $250,000.

MINES BUILDING

THE AGRICULTURAL BUILDING.

ONE of the most magnificent structures raised for the Exposition is the AGRICULTURAL BUILDING, of which MCKIM, MEADE & WHITE, of New York, are the architects. The style of architecture is classic renaissance. This building is put up very near the shore of Lake Michigan, and is almost surrounded by the Lagoons that lead into the Park from the Lake. The building is 500 x 800 feet, its longest dimensions being east and west. The north line of the building is almost on a line with the PIER extending into the Lake, on which heroic columns, emblematic of the Thirteen Original States, are raised. A Lagoon stretches out along this entire front of the building. The east front looks out into a harbor which affords refuge for numerous pleasure craft. The entire west exposure of the building faces a continuation of the Lagoon that extends along the north side. With these picturesque surroundings as an inspiration the architects have brought out designs that have been pronounced all but faultless. For a single story building the design is bold and heroic. The general cornice line is 65 feet above grade. On either side of the main entrance are mammoth Corinthian pillars, 50 feet high and 5 feet in diameter. On each corner and from the center of the building pavilions are reared, the center one being 144 feet square. The corner pavilions are connected by curtains, forming a continuous arcade around the top of the building. The main entrance leads through an opening 64 feet wide into a vestibule, from which entrance is had to the rotunda, 100 feet in diameter. This is surmounted by a mammoth glass dome, 130 feet high. All through the main vestibule statuary has been designed illustrative of the Agricultural industry. Similar designs are grouped about all of the grand entrances in the most elaborate manner. The corner pavilions are surmounted by domes 96 feet high, and above these tower groups of statuary. The design for these domes is that of three women, of herculean proportions, supporting a mammoth globe.

The AGRICULTURAL BUILDING covers more than nine acres, and together with the DAIRY and FORESTRY BUILDINGS, which cover 1.7 and 4.5 acres respectively, cost about $1,000,000.

To the southward of the AGRICULTURAL BUILDING is a spacious structure devoted chiefly to a Live Stock and Agricultural Assembly Hall. This building is conveniently near one of the stations of the elevated railway. It is a very handsome building and will undoubtedly be the common meeting point for all persons interested in live stock and agricultural pursuits. On the first floor, near the main entrance of the building, is located a Bureau of Information, in charge of attendants, who furnish visitors with all necessary information in regard to the Assembly Hall and the main Agricultural Building as well as other features of the Exposition. This floor also contains suitable committee and other rooms for the different live stock associations of every character, where such associations can meet and have their secretaries in constant attendance, thus affording this important industry ample headquarters near the Live Stock Exhibit and the Agricultural Building. On this floor there are also large and handsomely equipped waiting-rooms for ladies, lounging-rooms for gentlemen and ample toilet facilities. Broad stairways lead from the first floor into the Assembly-room, which has a seating capacity of about 1,500. This Assembly-room furnishes facilities for lectures delivered by gentlemen eminent in their special fields of work, embracing every interest connected with Live Stock, Agriculture and allied industries.

Taken in connection with the exhibits, this feature makes that part of the Exposition devoted to Live Stock, Agriculture and the Dairy a complete showing of the most advanced progress in these branches of industry. In the Assembly-room the most approved theories will be advanced and explained. On the grounds and in the AGRICULTURAL and DAIRY BUILDINGS will be the best illustrations of what can be accomplished when these theories are put into practice.

The entire second floor of the Assembly Hall is given up to committee rooms and rooms for headquarters for each and all of the different farmers' organizations in existence in this country.

Such a building was never erected at any Exposition and its construction here shows that the Board of Directors purposed affording every desirable facility that they could furnish to aid the great Live Stock and Agricultural interests.

AGRICULTURAL BUILDING.

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BALLOON OR BIRDSEYE VIEW.

(SEE THE TWO MIDDLE PAGES.)

WONDERFULLY beautiful is the picture presented by the Birdseye View of the Exposition Grounds and Buildings. Whether from the dome of the ADMINISTRATION BUILDING or from a captive balloon, the visitor will be amply repaid in looking down upon this magnificent array of graceful and imposing edifices and vast expanse of Park. Spread out beneath him lie more than 600 acres fronting on Lake Michigan—one of the grandest of inland seas—and containing scores of great structures which embody the best conceptions of America's greatest architects.

In the northern portion of the grounds he may see a picturesque group of buildings, forty or fifty of them, constituting a veritable village of palaces. Here on a hundred acres or more, beautifully laid out, stand the buildings of Foreign Nations and of a number of the States of the Union, surrounded by lawns, walks and beds of flowers and shrubbery. These are ranged on wide curving avenues and constitute one of the most interesting portions of the entire Exposition. In the western part of the group stands the ILLINOIS BUILDING, severely classic in style, with a dome in the center and a great porch facing southward. In this portion of the Park, too, stands the FINE ARTS BUILDING, a magnificent palace costing half a million. Just south of the Foreign and State buildings may be observed a considerable expanse of the Lagoon, with inlet to the Lake, and encompassing three islands. On the largest one stands the UNITED STATES FISHERIES BUILDING, flanked at each end by a curved arcade connecting it with two polygonal pavilions in which aquaria and the tackle exhibit are displayed. A little farther south, across an area of the Lagoon, is the UNITED STATES GOVERNMENT BUILDING. On the Lake shore east of its building, and in part in the intervening space, the Government shows a gun battery, life-saving station complete with apparatus, a lighthouse, war balloon, and a full size model of a $3,000,000 BATTLESHIP of the first class.

To the southward of the GOVERNMENT BUILDING stands the largest of the Exposition structures, that of MANUFACTURES AND LIBERAL ARTS. Surrounding this on all sides is a porch two stories in height, affording a delightful promenade and a view of the grounds and buildings generally.

A little farther south extending 1,000 feet into the Lake is the Pier, which affords a landing place for the Lake steamers, and encloses a harbor. This harbor is bounded on the east far out in the Lake by the beautiful facade of the CASINO, in whose free space crowds of men and women, protected by ceiling of gay awnings, look east to the Lake and west to the long vista between the main edifices as far as the gilded dome of the ADMINISTRATION BUILDING. The first notable object in this vista is the colossal Statue of Liberty rising out of the Lagoon at the point where it enters the land, protected by moles which carry sculptured columns emblematic of the Thirteen Original States of the Union. Beyond this lies a broad basin from which grassy terraces and broad walks lead on the north to the south elevation of the enormous MAIN BUILDING, and on the south to the structures dedicated to Agriculture, Live Stock, Forestry and the Dairy industry.

From the PIER extending westward across the Park, is a long avenue or court, several hundred feet wide, affording a view of almost unparalleled splendor. All down this Grand Avenue, encompassing a beautiful sheet of water, stand imposing buildings along the majestic facades of which sweeps the gaze of the visitor until it rests on the ADMINISTRATION BUILDING nearly a mile distant. West of the AGRICULTURAL BUIDING stands MACHINERY HALL, which is its equal in size and is especially rich in architectural lines and details.

To the northward of the ADMINISTRATION BUILDING on either side and facing the Grand Avenue stand two more immense buildings, one for the Electrical and the other for the Mining Exhibit.

Near by is the Wooded Island—a delightful gem of primitive nature, in striking contrast with the elaborate productions of human skill which surround it.

In the southwestern portion of the grounds the spectator observes the great depots, the numerous railway tracks and the rapid coming and going of the trains taking visitors to and from the Grounds. To the northward is the great TRANSPORTATION BUILDING, and still farther on stands the HORTICULTURAL BUILDING, which is one of the most beautiful of the many beautiful edifices. Farther north still is the WOMAN'S BUILDING, and to the westward of it are the Bazars of all Nations and a various collection of structures and attractions of a semi-private character, all interesting to the visitor.